

1 **CLAIMS**

2  
3 1. A media processing system comprising:

4 a source; and

5 a software object, coupling the source to one or more of a plurality of  
6 processing chains, to satisfy multiple, non-combinable requests to the source for  
7 media content.

8  
9 2. A media processing system according to claim 1, wherein the software  
10 object is a segment filter.

11  
12 3. A media processing system according to claim 1, wherein the software  
13 object is exposed from an operating system executing on a computing system  
14 implementing the media processing system.

15  
16 4. A media processing system according to claim 1, wherein non-combinable  
17 requests for media include one or more of requests where a source time of the  
18 requested content do not align, requests where project time of the requests do not  
19 align, and/or requests where the requested content is to be processed differently,  
20 thus requiring a separate processing chain.

1 5. A media processing system according to claim 4, wherein the software  
2 object is implemented within a filter graph representation of a user-defined media  
3 processing project, to reduce invoked instances of the media source required to  
4 satisfy said non-combinable requests.

5  
6 6. A media processing system according to claim 1, wherein the software  
7 object receives independent requests for content from one or more media  
8 processing chains.

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10 7. A media processing system according to claim 6, wherein the software  
11 object generates and issues seek command(s) to satisfy said requests.

12  
13 8. A media processing system according to claim 1, wherein the media  
14 processing system selectively invokes multiple instances of the software object to  
15 satisfy multiple simultaneous requests for content, wherein each instance of the  
16 software object requires an associated instance of the media source and a  
17 processing chain.

18  
19 9. A media processing system according to claim 1, wherein the software  
20 object serializes multiple simultaneous requests for media content received from  
21 multiple processing chains.

1 **10.** A media processing system according to claim 1, wherein the software  
2 object is a segment filter in a filter graph of filters dynamically generated to  
3 process media in accordance with a user-defined processing project.

4  
5 **11.** A media processing system comprising:

6 a source;

7 a software object, coupling the source to one or more of a plurality of  
8 processing chains, to satisfy multiple, non-combinable requests to the source for  
9 media content; and

10 a scalable, dynamically reconfigurable matrix switch having a plurality of  
11 inputs and a plurality of outputs;

12 at least one matrix switch input being communicatively linked with a  
13 first processing chain portion;

14 at least one other matrix switch input being communicatively linked  
15 with a second processing chain portion;

16 the matrix switch being configured to dynamically couple one or  
17 more of the matrix switch inputs to one or more of the matrix switch  
18 outputs.

19  
20 **12.** The media processing system of claim 11, wherein the matrix switch is  
21 configured to dynamically couple said one or more matrix switch inputs to said  
22 one or more matrix switch outputs based, at least in part, on a media time  
23 associated with a user defined media processing project.

1 13. The media processing system of claim 11, wherein the matrix switch is  
2 configured to dynamically couple said one or more matrix switch inputs to said  
3 one or more matrix switch outputs based, at least in part, on a project time  
4 associated with a user defined media processing project.

5  
6 14. The media processing system of claim 11, wherein the matrix switch is  
7 configured to dynamically couple said one or more matrix switch inputs to said  
8 one or more matrix switch outputs based, at least in part, on content of a matrix  
9 switch programming grid.

10  
11 15. The media processing system of claim 11, wherein the matrix switch is  
12 configured to dynamically couple said one or more matrix switch inputs to said  
13 one or more matrix switch outputs based, at least in part, on a media time  
14 associated with a user defined media processing project, a project time associated  
15 with the user defined media processing project, and content of a matrix switch  
16 programming grid.

1           16.     A media processing system comprising:  
2           a source; and  
3           a software object, coupling the source to one or more of a plurality of  
4 processing chains, to satisfy multiple, non-combinable requests to the source for  
5 media content, wherein non-combinable requests for media include one or more of  
6 requests where a source time of the requested content do not align, requests where  
7 project time of the requests do not align, and/or requests where the requested  
8 content is to be processed differently, thus requiring a separate processing chain;  
9           wherein the software object is a segment filter in a filter graph of filters  
10 dynamically generated to process media in accordance with a user-defined  
11 processing project.

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13           17.     The media processing system of claim 16 further comprising a  
14 scalable, dynamically reconfigurable matrix switch having a plurality of inputs  
15 and a plurality of outputs; at least one matrix switch input being communicatively  
16 linked with a first processing chain portion; at least one other matrix switch input  
17 being communicatively linked with a second processing chain portion; and  
18           the matrix switch being configured to dynamically couple one or more of  
19 the matrix switch inputs to one or more of the matrix switch outputs.

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21           18.     The media processing system of claim 17, wherein the matrix switch  
22 is configured to dynamically couple said one or more matrix switch inputs to said  
23 one or more matrix switch outputs based, at least in part, on a media time  
24 associated with the user defined media processing project.  
25

1           **19.**     The media processing system of claim 17, wherein the matrix switch  
2 is configured to dynamically couple said one or more matrix switch inputs to said  
3 one or more matrix switch outputs based, at least in part, on a project time  
4 associated with the user defined media processing project.

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6           **20.**     The media processing system of claim 17, wherein the matrix switch  
7 is configured to dynamically couple said one or more matrix switch inputs to said  
8 one or more matrix switch outputs based, at least in part, on content of a matrix  
9 switch programming grid.